

In the Claims:

Subc² 1. (Once amended) An electronic switching apparatus for flexibly

2 interconnecting a plurality of signal endpoints, the apparatus comprising:

3 a first circuit for receiving at least one input signal from at least one

4 input endpoint, the first circuit having at least one barrel shift register coupled

5 to at least one of the at least one input endpoint for receiving the at least one

6 input signal, shifting and rotating the at least one input signal, and

7 transmitting at least one output signal; and

8 a second circuit coupled to outputs from the first circuit for sending at

9 least one received signal to at least one output endpoint.

Subd¹ 2. (Once amended) The electronic switching apparatus of claim 1, wherein the

2 at least one input signal comprises a data signal that is received in serial form

3 including a plurality of data channels interleaved therein.

1 3. (Once amended) The electronic switching apparatus of claim 2, wherein the

2 second circuit further comprises at least one multiplexer selectively coupled to

3 the at least one barrel shift register thereby effectively enabling digital signal

4 switching simultaneously between the at least one input endpoint and the at

5 least one output endpoint.

1 4. (Once amended) The electronic switching apparatus of claim 1, wherein the
2 at least one input signal comprises a data signal that is received in parallel
3 form and converted to serial form.

1 5. (Once amended) The electronic switching apparatus of claim 2, wherein the
2 barrel shift register interconnects a plurality of received input signals at
3 different times.

Subj 6!
Cont
A1
6. (Once amended) The electronic switching apparatus of claim 1, wherein the
1 at least one input endpoint or the at least one output endpoint corresponds to
2 at least one pin for a coder/decoder (codec) device, such codec device being
3 compliant with an AC97 or an I2S convention.

Subj 7
7. (Once amended) A method for electronic signal coupling, the method
1 comprising the steps of:
2 receiving a first set of digital signals, the received first set of digital
3 signals being provided to a plurality of barrel shift registers;
4 shifting and rotating the first set of digital signals; and
5 transmitting a second set of digital signals, the transmitted second set of
6 digital signals being provided from a plurality of multiplexers, the plurality of
7 multiplexers being selectively coupled to the barrel shift registers such that at
8 least one signal selected in the first set of digital signals is selectively coupled
9 for transmission in the second set of digital signals.

~~Subj 1~~ 8. (Once amended) The method of claim 7, wherein the first set of digital signals comprises a data signal which is received in either serial or parallel form, the data signal being converted to serial form when received in parallel form.

~~Subj 1~~ 9. (Once amended) The method of claim 7, wherein a plurality of digital signals in the first set of digital signals are transmitted as digital signals in the second set of digital signals separately at different times.

~~Subj 1~~ 10. (Once amended) The method of claim 7, wherein at least one transmitted digital signal from the second set of digital signals is coupled to at least one pin associated with a coder/decoder (codec) according to an AC97 or I2S signal interface.

Add new claims 11-14 as follows:

Sub 1 11. (New) The method of claim 7, wherein the step of transmitting further
2 comprises transmitting the at least one output signal to at least one
3 multiplexer at different times.

Sub 1 12. (New) The electronic switching apparatus of claim 1, wherein the barrel
2 shift register is a loadable barrel shift register.

A2 *Sub 1* 13. (New) The electronic switching apparatus of claim 1, further comprising a
2 plurality of multiplexer modules.

Sub 1 14. (New) A system for electronic signal coupling comprising:
2 means for receiving a first set of digital signals, the received first set of
3 digital signals being provided to a plurality of barrel shift registers;
4 means for shifting and rotating the first set of digital signals; and
5 means for transmitting a second set of digital signals, the transmitted
6 second set of digital signals being provided from a plurality of multiplexers, the
7 plurality of multiplexers being selectively coupled to the barrel shift registers
8 such that at least one signal selected in the first set of digital signals is
9 selectively coupled for transmission in the second set of digital signals.